

69. (New) A display apparatus according to claim 66, wherein when said modulation signal is turned off prior to the modulation signal based on the luminance signal, the modulation signal is adjusted to have a longer pulse width.

70. (New) A display apparatus according to claim 66, wherein when the modulation signal is turned on following to the modulation signal based on the luminance signal, the modulation signal is adjusted to have a shorter pulse width.

REMARKS

Claims 61-70 are presented for examination in this application, having been added in place of Claims 1-60, which have been canceled without prejudice or disclaimer of the subject matter. Claims 61 and 66 are in independent form.

In the Office Action, Claims 1-60 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,195,077 (Gyouten et al.).

An object of the present invention is, when modulation signals to be supplied to display devices (e.g., for individual pixels) adjacent to each other in the row direction have different pulse widths, to suppress the common effect that the luminance of those modulation signals which have longer pulse width deviates from a desired value. In order to achieve the above object, in an apparatus according to Claim 61, pulse width modulators which are provided one for each of plural column wirings adjacent to each other input information of adjacent columns, and determine, based on the above, the pulse widths of modulation signals to be supplied. That is, a given line's signal can be modified to compensate for deviation that would conventionally occur due to the characteristics of the

signal that is generated to an adjacent line. In the apparatus of Claim 61, the information relating to the signal on the adjacent column is the luminance of the adjacent signal, as in the embodiment of Fig. 1. In another aspect of the invention, set out in independent Claim 66, the information that relates to the signal on the adjacent line is a modulation signal of the adjacent row, as in the embodiment shown in Fig. 5.<sup>1</sup>

As a result, it is made possible to compare the pulse width of the modulation signal to be supplied to one column with the pulse width of the modulation signal to be supplied to an adjacent column, and to correct the first-mentioned modulation signal based on the difference in the pulse widths. By virtue of this feature, it becomes possible to suppress cross-talk that would otherwise be generated by the combination (displaying state along one line) of the luminances of the various display devices (pixels) arranged in the column direction.

In contrast, *Gyouten* relates to changing a correction pulse width added to a modulation signal according to how far apart in the column direction the pixel in question and the column driving circuit (segment driver 2) are. The correction pulse is determined entirely by the pixel position, and is *not* adjusted according to a difference between the luminances of the signals for pixels that are adjacent to each other in the row direction, as recited in Claim 61. That is, according to *Gyouten*, the pulse modulators in a particular column do not receive as an input a luminance signal (or modulation signal) from an adjacent column. The *Gyouten* apparatus can correct for (eliminate) nonuniformity in

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<sup>1</sup>/ It is to be understood that the reference to these embodiments is purely by way of example, and that the scope of the claims is not limited to or by the details of those or other particular embodiments illustrated in the present application.

luminance due to differences in pixel position, but cannot correct for nonuniformity in luminance due cross-talk with signals on an adjacent line, as is achieved with an apparatus according to either Claim 61 or Claim 66.

In short, nothing has been found, or pointed out, in *Gyouten* that would teach or suggest adjusting a luminance signal based on a characteristic of a signal that is generated to an adjacent line. The only adjustment seen by Applicants is based entirely on pixel position, and not on a signal generated to a neighboring line.

Accordingly, it is believed to be clear that Claims 61 and 66 are both allowable over *Gyouten*.


The other claims in this application are each dependent from one or the other of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of the patentability of each on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and its entry is therefore believed proper under 37 C.F.R. § 1.116. In any event, however, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, he is respectfully requested to contact Applicants' undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

  
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